

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 21. (New) A method for providing printer recognition and management of a print
2 job entity, comprising:
3 establishing a repository of attributes and status information associated with each
4 print job that passes through a printer system;
5 providing an interface to a plurality of components to allow access to the attributes
6 and status information in the repository by the plurality of components; and
7 establishing a job monitor for managing the repository of attributes and status
8 information associated with each print job, for responding to a call by a printer component
9 and for managing interactions between printer components in order to control the processing
10 of the job.

1 22. (New) An apparatus for providing printer recognition and management of a
2 print job entity, comprising:
3 a repository of attributes and status information associated with each print job that
4 passes through a printer system;
5 an interface to a plurality of components, the interface providing access to the
6 attributes and status information in the repository by the plurality of components; and
7 a job monitor for managing the repository of attributes and status information associated with
8 each print job, for responding to a call by a printer component and for managing interactions
9 between printer components in order to control the processing of the job.

1 23. (New) The apparatus of claim 22, wherein the interface provides an ability for
2 components to process a job according to requirements of the component and reports job
3 attributes and processing status of the job for common access by other components.

1 24. (New) The apparatus of claim 22, wherein the interface provides a component
2 access to common variables, the components presenting job attributes or status to the
3 interface.

1 25. (New) The apparatus of claim 22, wherein the a repository and interface are
2 provided by a job monitor, the job monitor further providing logical views to obtain a next
3 job to be processed by a component and to obtain a list of all jobs in the order that they are
4 processed.

1 26. (New) The apparatus of claim 22, wherein the job monitor is used to update
2 attributes of print jobs.

1 27. (New) The apparatus of claim 26, wherein the job monitor determines a next
2 job to process, the component determining valid states for a call.

1 28. (New) The apparatus of claim 27, wherein the job monitor includes a
2 multiplexor, and wherein the valid states for a multiplexer further comprise:
3 an unknown state for when a job identification is requested; and
4 a pull print queue state for the job when the job is stop-flowed at a port connection
5 manager waiting for access to the printer because a print engine is processing another job;
6 wherein the multiplexer receives the job and selects to place the job in a job must be
7 spooled state, a may spool state or must print state.

1 29. (New) The apparatus of claim 28, wherein the multiplexer routes the
2 incoming job to the print engine or the spooler according to which becomes available first
3 when the job is a job that may spool.

1 30. (New) The apparatus of claim 22 further comprising a spooler.

1 31. (New) The apparatus of claim 30, wherein the spooler receiving a job
2 identification request, enters a not spooled state when the spooler has not yet processed the
3 job, enters a spooling, can despool state when the job is being written to the spool device
4 thereby allowing the job to be selected for despooling at any time, enters a spooling,
5 despooling state when the job is being written to the spool device and is also being read from
6 the spool device, enters a waiting to despool state when the end of the job has been received,
7 enters a despooling state when the job is being read from the spool device and written to the
8 multiplexer and enters the done state when the job is finished being processed by the spooler.

1 32. (New) The apparatus of claim 22 further comprising an interpreter.

1 33. (New) The apparatus of claim 32, wherein the interpreter enters a waiting for
2 data state when job processing by the interpreter has started, enters an interpreting state when
3 the job is being processed by the interpreter and enters a done state when the job is finished
4 being processed by the interpreter.

1 34. (New) The apparatus of claim 22, wherein the a repository and interface are
2 provided by a job monitor, the job monitor further handling incoming jobs with a port
3 connection manager, wherein the port connection manager calls to a multiplexer to process
4 the job.

1 35. (New) The apparatus of claim 22, wherein the a repository and interface are
2 provided by a job monitor, the job monitor further deciding whether to assign a job to the
3 printer, whether to assign a job to a spooler, whether the job must wait for available resources
4 or whether the job cannot be processed.

1 36. (New) The apparatus of claim 22 further comprising a job monitor to fetch
2 jobs in an order that is dependent upon the calling component.

1 37. (New) The apparatus of claim 36 further comprising a job monitor for
2 examining process job states and variables to determine the correct response and to return an
3 appropriate job identification for a job.

1 38. (New) The apparatus of claim 22 further comprising a job monitor for
2 providing a common method of accessing the variables associated with a job for the
3 components.

1 39. (New) An article of manufacture comprising a program storage medium
2 readable by a computer, the medium tangibly embodying one or more programs of
3 instructions executable by the computer to perform a method for providing printer
4 recognition and management of a print job entity, the method comprising:
5 establishing a repository of attributes and status information associated with each
6 print job that passes through a printer system;
7 providing an interface to a plurality of components to allow access to the attributes
8 and status information in the repository by the plurality of components; and
9 establishing a job monitor for managing the repository of attributes and status
10 information associated with each print job, for responding to a call by a printer component
11 and for managing interactions between printer components in order to control the processing
12 of the job.